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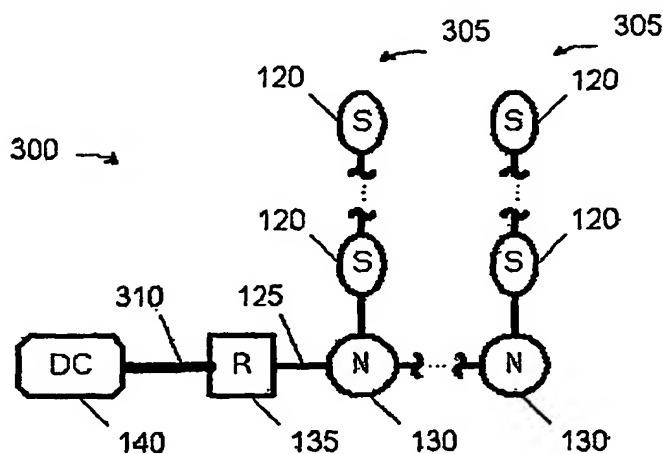
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(54) Title: **IMPLEMENTING A NETWORK INFRASTRUCTURE IN A SEISMIC ACQUISITION SYSTEM**



(57) Abstract: A method and apparatus implementing a network infrastructure in a seismic acquisition system are disclosed. The apparatus is a seismic acquisition system, comprising a plurality of seismic data sources (120) capable of generating data; at least one data collection system (140) utilizing an open network protocol; and at least one line network (300) connecting the data sources to the data collection system and utilizing an open network protocol. The line network (300) includes a plurality of data source nodes (130) at which a portion of the plurality of seismic data sources are respectively attached to the line network; and a router (135) for routing data generated by the seismic data sources (120) to the data collection system (140) through the data source nodes (130) in accordance with the open network protocol. The method comprises assigning at least two respective network addresses to each one of a plurality of seismic data sources,

a plurality of data source nodes, a plurality of routers, and a data collection system; routing data generated by the data sources through the data source nodes and the routers to the data collection system; correlating the network addresses of the seismic data sources to the physical location of the respective seismic data sources; and correlating the physical locations of the respective seismic data sources to the data generated by the respective seismic data sources.